THE DELAWARE AND HUDSON RAILROAD BULLETIN

"The D&H"

JULY 15, 1931

MIDSUMMER
NEAR RAY BROOK, N.Y.

Smiles

NOTHING on earth can smile but man. Gems may flash reflected light, but what is a diamond-flash compared to an eye-flash and a mirth-flash? Flowers cannot smile; this is a charm that even they cannot claim. It is the prerogative of man; it is the color which love wears, and cheerfulness and joy—these three. It is the light in the windows of the face, by which the heart signifies it is at home waiting. A face that cannot smile is like a bud that cannot blossom, and dries up on the stalk. Laughter is day, sobriety is night, and smile is the twilight that hovers gently between both—more bewitching than either.

—HENRY WARD BEECHER.

"the D&H"
The
DELAWARE AND HUDSON RAILROAD
CORPORATION
BULLETIN
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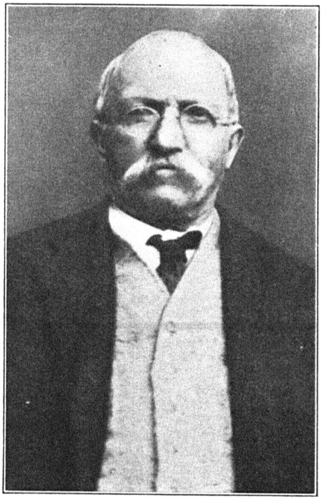
In Sunny Italy

Delaware and Hudson Happenings Still Interest Veteran Foreman



LOUIS FARONE

MOST of us are familiar with the anecdote of the king, now celebrated in song and story, who, in the midst of the regal splendor of his court, pleaded that he be given "a little bit of butter for his bread."

LOUIS FARONE, for forty years trackman and foreman on our Saratoga and Champlain Divisions, once found himself in a somewhat similar position, the height of his ambition at the moment being to obtain a full cup of tea. To appreciate this little incident, some idea of the conditions under which it occurred is helpful.

Born November 8th, 1859, in a picturesque little village in the hills near Naples, Italy, its history dating back to the time of the Roman Empire, LOUIS attended the village school in his boyhood days. As his father was a surveyor and landowner of moderate means, the boy assisted him in the measuring of lands, thus gaining experience which was later to prove of value in his railroading career.

He was not really of an adventurous spirit; still the monotony of this work wore on him and, in the year 1880 he decided to follow in the wake of an older brother by sailing for the much talked of "land of golden opportunity."

Although but 21 he had no illusion of finding the streets paved with gold, nor of achieving great heights, but he knew that with honest labor one gains that which fame and fortune do not always bring,— satisfaction and peace.

On his arrival in America, his first thought was to find employment, and he soon found on the Delaware and Hudson, then actively engaged in laying new rails, all that he had hoped for. Schenectady was the point of his initiation into a work which became, with the passage of time, of heart interest to him.

Many years were spent in this way: working where most needed, being free as to family to travel, and being rewarded with promotion for his steady and diligent service.

At North Whitehall, while in the capacity of foreman under Division Engineer Smith, he assisted in the rebuilding of the South Bay Bridge. The change-over to "heavy" steel rails in the territory between Albany and Cohoes also found MR. FARONE in the center of the action. This was in 1887-88 and involved replacing the 62-pound rails with 67-pound, estimated to be heavy enough to bear the stresses caused by the use of what was then "heavy power" (130-pound rail is now the Delaware and Hudson standard for main line track).

The rigors of winter on the Chateaugay Branch made MR. FARONE long for the sunny climate of his boyhood home. After 40 years' service he retired and returned to his native land, taking many pleasant memories of the years spent with the Delaware and Hudson which had become for him a big family.

So ends the story of his work. But this by no means completes the description of his life in America or his railroading career. In the tales of the after-work hours of MR. FARONE and his associates, most of them far from home and friends, and forced to adapt themselves to new surroundings and living conditions, there is a strong human appeal. "Boarding house" days have come into the lives of many of us at one time or another. MR. FARONE'S case is no exception.

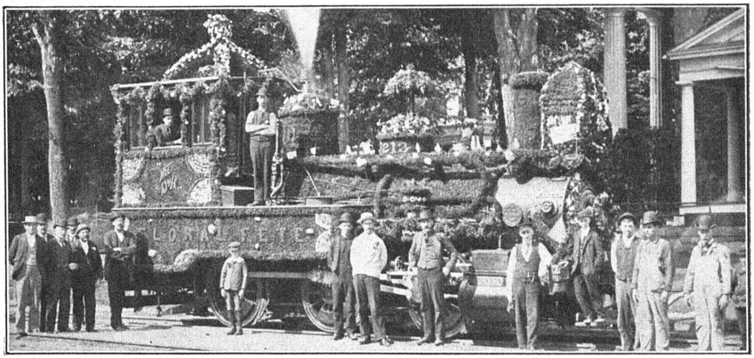
Beneath the rough exterior of these workmen beat the hearts of children; they often yearned for a second piece of pie—in vain! The lady who kept the boarding-house was a frugal soul and had, among other things, her own ideas of what constituted a full cup of tea—which brings us back to the starting point of our story.

Although granting the justice of her allowing but one portion of pie apiece, MR. FARONE resented the half-cup of tea which the thrifty lady served at the close of a hard day's work. So he decided to cure her of this habit.

The following evening, as she placed the partly filled cup before him, he took the milk pitcher and innocently filled the cup to overflowing before her very eyes. A quick mental calculation convinced the dear lady that it would be cheaper for her to fill the cup with tea and from that time on MR. FARONE had no difficulty from this source.

Many other little incidents of his railroading life pass through his mind as he gazes out over the picturesque little village with its ancient castles, and its orchards and vineyards. Surrounded by the scenes of his boyhood he, nevertheless, eagerly awaits the arrival of *The Bulletin*, through which he receives news of his former associates and coworkers.

At Saratoga in 1896



IT took Foreman J. F. OSBORN and his force two weeks' spare time to gather the flowers and moss used to decorate switcher 213 for the Saratoga Floral Fete of September 1896, to and from which 29 special passenger trains were operated. Included in the photograph are: MR. OSBORN; Yardmaster D. DILLOWAY; Engineman W. A. ASHTON, in cab; Fireman CORBIN WINNIE, on running board; Conductor T. J. SKINNION; and Trainmen E. BARNUM, G. ENSIGN, J. NILES, and S. SCHAUBER.

Sight-Saving Hints

By DR. FRANKLIN ROYER

THE normal eye, without any muscular effort, gets a good picture on the retina from a distance of from several feet up to twenty feet or more. For close work, like reading, the normal eye re-shapes the front of the crystalline lens just a little, making it bulge forward, and the outside muscles of the eye draw the eyeballs in a little toward the nose. Both eyes in this position see the same picture at the same time.

The far-sighted eye has to use the inside muscles to reshape the lens a varying amount even for distant vision but, for near vision, a strong pull—a real tug of war —by the inside muscles is required to bulge the lens forward enough to give a sharp picture on the retina.

The near-sighted eye, no matter what muscle exertion is made, cannot see accurately at a distance without glass lenses. At close range the near-sighted eye can, by flattening the front of the lens, modify the picture on each retina but, if the near-sightedness is great, the outside eyeball muscles pull the eyes very greatly toward the nose and hold them there to secure evenness of such pictures as may be obtained in each retina. These points guide us in thinking through helpful hygienic measures to save the vision in such eyes.

Use of the far-sighted eye for distant vision, that is, beyond two feet is not apt to do any harm. Prolonged use of the far-sighted eye for close vision is very apt to set up symptoms of eye strain sooner or later and, ofttimes, with disastrous results; many forms of headache, nervousness, digestive disturbances, and what not. It is almost as fatiguing for a far-sighted eye to hold for long intervals of time the muscle pull required to bulge the lens forward as it is for a boy to hold his arm in a horizontal position for any length of time. Periods of eye rest must alternate with periods of muscle pull, otherwise the danger symptoms.

If we must live indoors, and if we must begin close use of the eyes in very early child life, then we must either be prepared to ask nature to reshape the eye early enough to do close work or we must be prepared to adopt for the purpose glass lenses that may fit the eye to the evidence of civilization around us, viz., houses, narrow streets, windows, printed books, needle and thread, and so on.

Remembering that the far-sighted eye usually becomes less far-sighted by kindergarten age and early school life and often through stretching becomes a near-sighted eye, it will be well to avoid prolonged use of the eyes for close work until early childhood and early school life have been safely passed. It is imperative also that on the slightest evidence of eye strain, or of stretching of the eye-ball to discontinue close work and to relieve the manifest need by the use of properly fitted glass lenses.

The near-sighted person should neither use his eyes for a long period of time for distant vision nor should he be allowed to use his eyes for close vision for any considerable period of time, without rest. Eye strain symptoms are not so frequent in the near-sighted child, but the likelihood of permanent eye injury is very much greater because of overstretching in the length of the eyeball. It is sometimes advisable that glasses be used for distant vision by the near-sighted, while for close work, if properly planned with intervals of rest, no glasses at all need be worn. If, however, the near-sightedness is of high degree, it sometimes becomes necessary to have two pairs of glasses: one for reading, the other for distant use.

With the near-sighted, the precaution should be given during the period of life when greatest stretching of the eye is apt to take place; that is, between the early years of school life and the end of school life. If this period is survived safely dangers of stretching are not so great later.

The risks from too great use of either the far-sighted or near-sighted eye are: that from the muscular exertion for sharpening the focus in the far-sighted, high tension is stimulated and glaucoma is more likely to occur in adult life; while in the near-sighted the dangers from muscular exertion are hemorrhages into the inner coats of the eyeball, or detachment of the retina. Either condition is fraught with grave results to vision.

The near-sighted, as well as the far-sighted, for close vision, need adequate light; adequate light not only on the work or on the things to which the vision is directed, but light admitted from directions that will do the greatest good and give the greatest eye ease. The equivalent of ten-foot candles of light or more, admitted preferably from above or over the shoulder, and admitted in a way that will permit of no glare, adds to the eye ease, minimizes eye strain and lessens the danger of harming vision.

The naked filament of an electric bulb in full view of the handicapped eye has as wicked an effect on the human as has the red blanket flashed by the matador in front of the bull: each in effect is annoyingly irritating. Everyone should avoid having the light strike directly in the eye. For place of work, study or recreation, even in such games as playing cards, great advantage accrues from a proper seating placement in relation to the thing to be viewed and proper lighting of the thing looked at.

Porter Presented Watch

FOR the past twenty years THOMAS H. BROOKS, Pullman Porter, of Yonkers, N. Y., has been assigned to accompany the equipment furnished by the Pullman Company for the annual inspection trip of the President and Board of Managers of The Delaware and Hudson Company over our lines.

On the last day of the trip this year, Porter BROOKS was called "on the carpet" where President L. F. LOREE, on behalf of the Board of Managers, presented him with a watch in recognition of the twentieth annual trip.

The cover of the watch was inscribed as follows:

The Delaware and Hudson Company
to
Thomas H. Brooks
In Appreciation of Services
Upon 20 Annual Inspection Trips
President and Board of Managers

On the inside of the cover were inscribed the date, June 12, 1931, and the names of the President and Board of Managers, as follows:

LEONOR F. LOREE,
CORNELIUS VANDERBILT,
ROBERT C. PRUYN,
HENRY W. DEFOREST,
CHARLES S. WESTON,
EUGENIUS H. OUTERBRIDGE,
EDWARD R. HARRIMAN,
JOHN WYCKOFF METTLER,
THEODORE PRATT,
GEORGE WELWOOD MURRAY,
I. HASBROUCK CHAHOON,
J. TABER LOREE,
EDWARD D. DUFFIELD.

Porter BROOKS, who has been in Pullman service since 1899, is regularly assigned to the New York Central run between New York and Syracuse.

Unbreakable Tableware

TABLE- and fountain-ware that looks and feels like fine English porcelain but, unlike it, is practically unbreakable—only cracking if dropped from a considerable height or with great force—is now being widely marketed by the American Cyanamid Co., through its subsidiary, Bettleware Corp. This Bettleware, sold in 10 bright colors and pastel shades with a glossy finish that, if dulled by constant use, can be restored by buffing, is made from a moldable powder, an American cyanamid by-product, fused in chromium-plated molds under tremendous heat and pressure.

The new ware has a special appeal for hotels and restaurants, now averaging one to three replacements of glass and china annually. Soda fountains are interested for the same reasons and because Bettleware's insulating properties are said to keep cold drinks cold, hot drinks hot, for longer periods than glass or china.

At present retail prices—tumblers 40 cents each; cups and saucers, $1.25 a set—Beetleware is not a competitor for the merchandise of the 10 cent store tableware department, but the manufacturer, who has been selling it direct, since jobbers handling over 75 per cent of hotel glass and chinaware are shy of a product that might spoil their regular line of business, tells of a sales volume approaching seven figures in the introductory year—*The Business Week.*

Workmen's Compensation

By JESSE C. ELLIS, *Compensation Claim Agent*

(Continued from Issue of June 15th)

THIS first Workmen's Compensation Act was intended to remedy and relieve the more serious faults of the common law system through the substitution of an entirely new procedure of a simple and summary nature designed for quick relief. It, of course, applied only to claims for damages between employer and employe, and, naturally, where this relationship did not exist the injured party still has his rights determined by the Courts in the old way.

This law was declared unconstitutional, after a very brief term of existence, by the Court of Appeals, the Court remarking that the liability sought to be imposed upon employers was the taking of property without due process of law and was, therefore, void. After an amendment to the Constitution, a new law was passed in 1913, becoming effective July 1, 1914, the constitutionality of which has been sustained by both the State and Federal courts.

Era of Compensation Laws

This was an era of compensation legislation in the United States, for, in the meantime, other states, beginning with Washington in 1911, enacted compensation laws, and at the present time, there are but four states in the southeastern part of the Union without such laws. They are South Carolina, Florida, Mississippi, and Arkansas.

Although all of these statutes differ in some particulars, all accomplish the primary object of providing a reasonable compensation which shall be paid without fail, and at a minimum cost of adminstration, to the injured worker or his dependents. Compensation is paid at stated intervals so that the dependents, in case they are minors, shall not suffer in attaining a normal development, which is necessary for self-support, and in order that they shall not become public charges by reason of industrial accidents.

Due probably to the radical change in method, there was at first some dissatisfaction on the part of employers toward what they considered an additional burden on industry. It was short-lived, however, and now, I believe, that, generally, industry has come to look upon the compensation remedy as a practical solution of the old economic problem of taking care of its industrial accidents. It may well take this attitude, for it is only necessary in most industries to so fix the price of its finished product that the expense of its accidents is shifted to the consumer and society in general.

It seems most appropriate to point out here how political and economic evolution resulting in laws of this character, works a distinct financial hardship upon common carriers by railroad. By way of illustration; a contracting firm, in estimating the cost of a particular undertaking, will see to it that the proper percentage to care for their compensation insurance is included, resulting of course in the eventful absorption of this item by the community. But what about the railroads? Are they, with their numerous and burdensome regulatory subjugations, permitted to proportionately increase freight and passenger tariffs to take care of such matters? Manifestly no. Railroads are made subject to the acts, it is true, but the fact that they are not able to take advantage of whatever economic benefits accrue to industries generally by reason of such legislation is, apparently, entirely lost sight of.

Federal Statutes Take Precedence

It may be proper here to say, as probably most of you know, that the claims of employees for personal injuries sustained in railroad service are now governed by the Federal Employer's Liability Act of 1908, and the Workmen's Compensation Acts of the respective states through and in which the railroads operate, the Federal statute taking precedence where both the railroad and the injured employee are engaged in interstate commerce at the time of the accident, and the appropriate State Workmen's Compensation Act being applicable where the injured employee is engaged in intrastate commerce at the time of the accident.

The Delaware and Hudson Railroad Corporation, operating in and through the States of New York, Pennsylvania, and Vermont is, of course, an interstate carrier and is subject to the provisions of the Federal Employer's Liability Act, as well as the Workmen's Compensation Laws of each of these States.

It will be seen, therefore, that, in the event of a personal injury to a railroad employee, it is first necessary to determine what class of commerce, inter or intra-state, that employee was engaged in at the time of the accident, so that the appropriate statute may be given its legal significance in dealing with the claim. In arriving at this determination we must look to the adjudicated cases of the Courts, and it seems proper to say here that, although the question has been passed upon many times by both Federal and State Courts, the proper classification is ofttimes a difficult one of solution, owing to the conflict of authorities and the varied situations that arise. A perfectly natural question might be, "Are not all employees of an interstate railroad engaged in carrying on interstate commerce?"

Supreme Court Rules

The United States Supreme Court, in passing upon this question, said, "Having in mind the nature and usual course of business to which the Act relates and the evident purpose of Congress in adopting the Act, we think it speaks of interstate commerce, not in a technical legal sense, but in a practical one better suited to the occasion, and that the true test of employment in such commerce, in the sense intended is, 'Was the employee at the time of the injury engaged in interstate transportation or in work so closely related to it as to be practically a part of it.'" It is clear, therefore, that the claims of all employees of an interstate commerce railroad do not come under the Federal Act.

For the purposes of comparison, it may be well to very briefly point out the difference in theories between the common law remedy, the Federal Employer's Liability Act, and Workmen's Compensation in the various states.

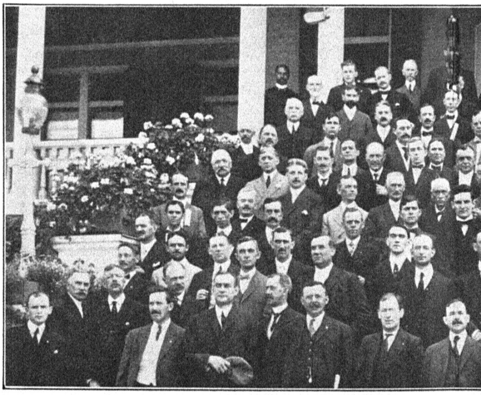
At common law, in order to succeed in an action, it was necessary to prove negligence on the part of an employer, and, even though that were proven conclusively, if it were shown, first, that injury had been sustained through the negligence of a fellow servant, or, second, that the negligence of the injured employee had contributed to the injury, or, third, that the injured person had assumed the risk of injury, these constituted complete defenses to the employer.

The Federal Employer's Liability Act reserves to the injured employee the common law right to sue, and, while it is still necessary to prove negligence on the part of the employer, that Act has abrogated the fellow servant rule, and the defenses of contributory negligence and assumption of risk have been subjected to restriction.

Now, under the Workmen's Compensation Acts the remarkable feature and radical change is, not the change in procedure, but the change in theory. As has been said, for centuries the law had assessed the damages against an employer only when he was at fault. Now, under the Workmen's Compensation Laws, the employer is liable to pay compensation to an injured workman without regard to fault, even though the employer is himself entirely free from blame, or in other words—if the injury arose out of and in the course of the employment. The only exception in the average compensation law being that—there shall be no liability on the part of an employer when the injury has been solely occasioned by intoxication of the injured employee while on duty, or by willful intention of the injured employee to bring about the injury or death of himself or another. Defenses? Yes. But dangerous to assert and most difficult to prove, the burden of proof being on the employer in each instance.

The Workmen's Compensation Laws, as originally enacted, dealt solely with accidental injuries. The present tendency is to so amend these laws as to include physical infirmities of a non-accidental nature, but which may be viewed as in a degree connected with the employment, or, in other words, occupational diseases. At present eleven States, including New York, have made provisions for compensating employees for occupational disease.

First Meeting of Delaware and Hudson Ag



In the forty-four States having Compensation Laws, ten have compulsory laws and thirty-four are elective. The election privilege, however, amounts almost to compulsion because most of the laws having elective provisions, take from the employer his common law defenses of assumption of risk, contributory negligence, and negligence of a fellow servant. The section or article of an act abolishing the common law defense is often referred to as the "club" section—the medium adopted to drive the unwilling employer into apparent consent, or merely doing indirectly that which possibly constitutionally could not have been done directly.

The various Workmen's Compensation Laws provide for a specific rate of compensation during disability, taking the average earnings of the workman as a basis. It is paid periodically, the same as wages, with a specific number of weeks compensation payable in the same manner, for certain specified permanent injuries, as in cases resulting in the loss of a hand, arm, foot, leg, or eye. Necessary medical and surgical attendance is also provided for. The rates of compensation, the waiting periods before compensation shall begin, and the periods during which compensation shall be paid vary under the different state laws. In case of injury resulting in death provision for compensation is made for the widow, children, and other dependents.

Claims under the Workmen's Compensation Laws may be divided into five general classes: fatal, permanent total, permanent partial, temporary total, and temporary partial.

n Agents, Ft. William Henry Hotel, 1908

Under the various State laws the employer may carry his compensation insurance in several different ways. He may insure with a stock or mutual insurance company; he may insure with what is known as a "State Fund," if there is one in his State, or he may become a "Self-Insurer" by fillling certain obligations or regulations prescribed by statute in the way of depositing securities, or filing a bond, with a State Department to assure the payment of subsequent awards.

The Delaware and Hudson Railroad Corporation and its subsidiaries subject to the various compensation laws are "Self-Insurers" and pay their own claims and awards.

The Employer Pays

There is a somewhat prevalent, erroneous impression that compensation provided for by these laws is paid by the State: The State merely administers the law through duly constituted commissions—the employer pays.

There has been advocated from time to time the need of a Federal Compensation Law to supplant the present Federal Employer's Liability Act, which, if enacted, would provide a remedy for all railroad employees injured while employed in interstate commerce. It can readily be seen that, with the enactment of such a statute, claims of interstate employees could and would be handled judiciously and expeditiously, and that this type of litigation, with its attending waste, would be eliminated.

In conclusion, whatever may be said of the faults or virtues of Workmen's Compensation Laws, it is significant that no State Legislature has ever seriously considered their repeal when once tried, unless there was an even more "progressive" act in view. Each year brings an extension of this kind of legislation, and it is to be hoped, if not expected, that in time a considerable advance toward uniformity and stability may be accomplished.

Proper Respect

Pat's left eye was badly discolored. His wife asked who did it.

"Mike Murphy," he replied sadly.

"What!" she exclaimed "do you mean you let a little shrimp like Mickie Murphy black your eye?"

"Martha," said Pat, holding up his hand reproachfully, don't spake disrespectfully of the dead."

The
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Permission is given to reprint, with credit, in part or in full, any article appearing in THE BULLETIN.

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Telephones

A RAILROADER recently had occasion to call his office from an outside telephone. In response to the operator's "Deenaitch" he gave the number of the desired extension.

"Hello," said a gruff voice.

"Is Mr. Blank there?" asked our friend.

"Who?"

"Is this the Traffic Department?" he asked.

"Nope—wrong number," snapped back the gruff one, and bang! the receiver crashed onto the hook.

Now isn't that a splendid reception for someone who might have been trying to give the railroad some business?

Presumably the gruff person was busy. He was also thoughtless. He may even have been one of those who "don't care if they pull off every train on the railroad as long as the pay-car runs." At any rate, he is certainly doing his bit to bring such a thing to pass!

When you call the Traffic Department you hear "Traffic Department, Mr. Blank, speaking."

"That may be all right for the Traffic Department," says the busy yardmaster or accountant, "but we aren't the Traffic Department."

That's where you are all wrong. Everyone on the Delaware and Hudson payroll is in the Traffic Department when it comes to creating good-will or ill-will for the railroad.

A "wrong" number is one of the best ways to create ill-will especially if handled in an ungracious manner. Consequently every effort should be made to be civil to the person calling, and to notify our operator that the party calling should be properly connected.

It isn't necessarily the operator's fault when calls go astray. For quite a while requests for box cars, "gons" and "flats" came to us each morning until someone took pains to call extension 2—64 distinctly so that he no longer gets extension 64.

Think of this next time you use the phone.

Thankfulness

HOW often it is the unpleasant things which stand out in our minds, rather than the happier events of the day's work. Of course, the world is not perfect—we can pick flaws in anything, if we choose.

In four short stanzas, the writer of "A Prayer" has given much material for meditation.

Do we fully appreciate the beauties which surround us daily, or are we so absorbed in the darker side of the picture that we never see the light?

A Prayer

I'M blind! I know that I shall never see
The radiant sunshine nor the glim'ring stars
Or flowers, varied hues, but yet to me
There comes a joy, so great, so unconfined
I thank thee, Lord, that I am only blind.

I hear the songs the birds so sweetly sing
And children's happy voices in their play;
The loving words of friends, dear Lord, they bring
To me contentment, in these all I find
Enough of joy to thank thee I'm but blind.

I feel the sunshine and the cooling breeze,
The loving care of those who guide my steps.
I smell the perfume wafted from the trees
In blossom and the climbing rose entwined
Around my door, and thank thee I'm but blind.

I thank thee for the things I cannot see,
But can enjoy without the gift of sight.
For all of nature's joys thou vouchsafed me:
The sunshine, flowers, birds, the love I feel,
For these, dear Lord, in thankfulness I kneel.

C. S. W.

His Hours Unchanged

THE four or five hour workday is now being talked, and later may become a reality. Still there hasn't been much change for the fellow who makes a real success in life. His is still a fourteen- or sixteen-hour day.—*Capper's Monthly.*

New Box Cars *Have Several Novel Features*

NORMALLY about 180,000 box cars are loaded annually on the Delaware and Hudson Railroad, excluding the anthracite traffic. Of this number from fifty to sixty per cent are cars of Delaware and Hudson ownership, depending upon the owned cars available on line. A large percentage of the cars thus utilized carry such high class lading as paper and paper products, flour, feed, grain, etc., which must be transported in first class equipment. Many, too, are loaded with furniture, refrigerators, ground slate, cement, lime and similar commodities for which the provision of suitable equipment to protect the contents is equally important.

All units of car equipment must be considered in their separate classifications, as for example, hopper cars, box cars, flat cars, etc., the supply, the character of construction and the capacity of the various classes being governed, largely, by the nature of the traffic originated by the owning line.

Based on our requirements, the box car of 80,000 lb. capacity is considered the ideal unit for merchandise shipments. While there is a demand, at times, for larger cars, box cars are seldom loaded to their full axle capacity due to the light, bulky nature of the commodities usually transported, hence the handling of cars of increased tare weight, when not necessary, is not economical.

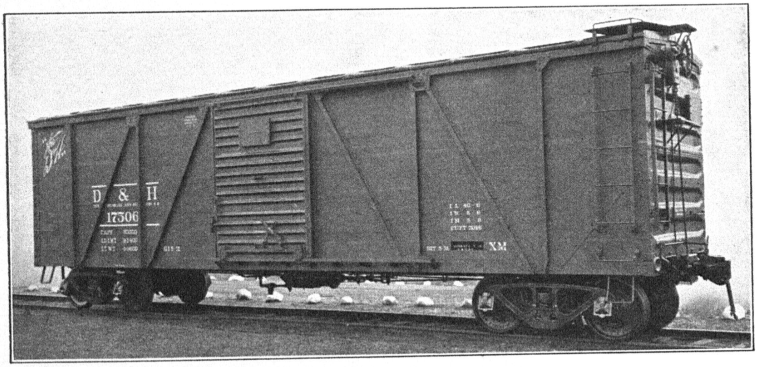
This year one hundred obsolete box cars will be retired and their places taken by new units. The program calls for the building of one hundred 40-ft., 80,000 lb. capacity, single sheathed, steel frame, box cars, the cubical capacity of which is 3016 cu. ft., load limit 91,400 lbs., tare weight 44,600 lbs.

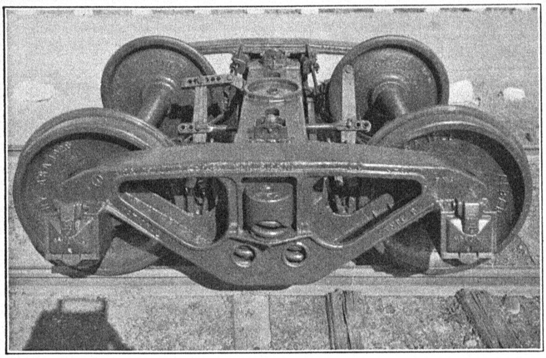
The cars are being built in the Delaware and Hudson car shops at Green Island, N. Y., which specialize in box car work. The construction is carried out on the progressive, station to station system, the production schedule having been arranged for one complete car each day.

The actual assembling and constructing operations, exclusive of the air brake work, are completed in eight major steps by a force of twenty mechanics, thirteen steel car repairers, and seven wood car repairers, who receive compensation on a piece work basis.

In the steel construction there are 225 fabricated steel parts of various shapes, the assembling of which involves the driving of 1934 rivets. These shapes were fabricated at the steel mills in accordance with Delaware and Hudson drawings and specifications.

Center sills are made up of two 12 inch, 40.3 lb., A. R. A. sections with one ¼″ x 20″ top cover plate, while the side sills consist of 7 inch, 18.8 lb., A. R. A. sections. Body bolsters are composed of ⅜″ steel, pressed diaphragms with ⅜″ x 22″ top, and ½″ x 18″ bottom, cover plates, while the cross bearers have 5-16″ diaphragms and ⅜″ x 8″ top, and ⅜″ x 6″ bottom, cover plates with a 3″ x 3″ x ¼″ stiffener angle





National Type "B" trucks are a decided departure from the conventional design, having no spring plank.

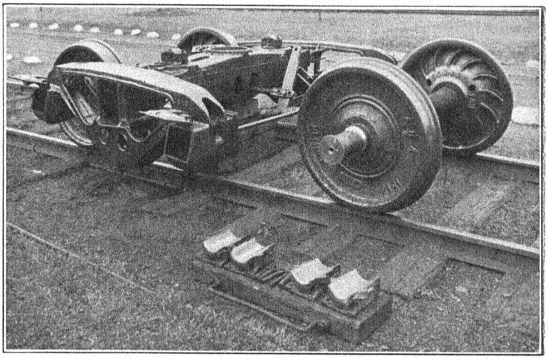
at the top cover plate. Cross tie webs consist of ¼" steel diaphragms.

The wood construction (siding, decking, posts, etc.) requires the use of 991 bolts. Practically all of these bolts have specially formed countersunk heads, thus sealing the holes and making them water tight. The absence of nails and the use of this type of bolt head, which is drawn flush with the wood, minimizes the possibility of damage to lading so often occasioned by protruding nails, bolts, etc.

The trucks are a special feature. They were designed and built by the National Malleable and Steel Castings Company and are known as the National type "B." The major objectives sought, and apparently attained in these trucks, are greater flexibility, better riding qualities, and increased clearance above the track.

The truck is a decided departure from the conventional A. R. A. type in that the spring plank is entirely eliminated. The spring arrangement consists of A. R. A. type "E" truck springs with two in the bolster end and two underneath in the side frame. The brake hanger brackets and journal boxes are cast integral with the side frame. By reason of the incorporated quick wheel change feature, it is possible for two men to change a pair of wheels in less than one-half hour. All the brake rigging is above the beams, consequently there is less liability of a brake beam pulling off in case of a derailment or accident. Maintenance is further reduced by the absence of bolts commonly used in the conventional design truck.

Draft attachments used are a complete assembly of the Miner A-22XB friction draft gear in con-



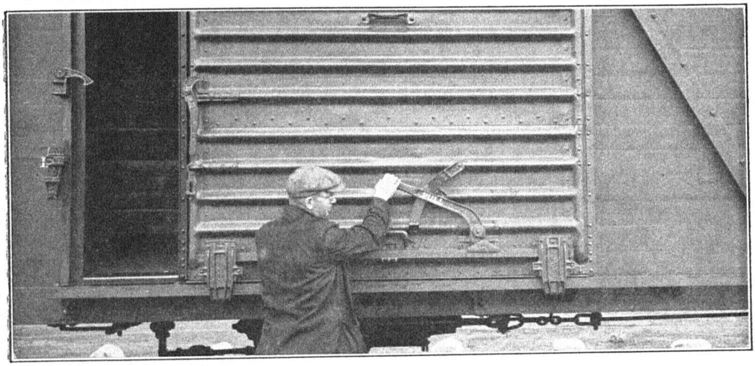
Quick wheel changes are made possible by the unusual features of the National Type "B" truck.

junction with the American radial type "D" coupler and vertical key yoke, which is interchangeable with any A. R. A. standard "D" coupler and cast steel yoke, the center sills being slotted to accommodate a horizontal key.

In this draft attachment constant bearing areas are maintained, regardless of angularity, in transmitting heavy loads from the coupler to the draft gear and from the draft gear to the center sills through substantial draft lugs. The function of the radial coupler is such that its adoption should materially reduce maintenance on draft riggings.

Another notable improvement is the style of side door adopted. The trouble too often experienced with doors jamming, and necessitating the use of bars to move them, usually with destructive results, is entirely overcome. The type of door on these cars is known as the Youngstown steel door with Camel bottom supported, roller lock lift arrangement. It differs considerably from the design of side door commonly used on box cars, being so constructed that when at rest the entire weight of the door is shifted from the rollers to the bottom door track. The door is bottom hung and operates on rollers which are equipped with roller bearings. To set the door in motion all that is necessary is to pull down slightly on the lifting lever (stenciled "Pull") and the door is raised from the track and its weight transferred to the rollers. At the top of the door opening there is a retaining "Z" bar which is so shaped that when the door is closed it seals itself in such a manner that no water can enter the interior of car. An additional feature is the door lock and wedge-shaped sealing pin. If this type of door is allowed to remain open, full or part way, it remains in that position until released, and damage to the door, posts, guides, etc., is greatly minimized.

Construction of the cars is facilitated by the use of novel devices. For example, at the truck assembly station there is a one-ton air motor hoist which travels on a boom having a 16 ft. radius. In this way the two men engaged in assembling the trucks are relieved of the labor of handling the heavy bolsters and side frames. When the trucks are completed they are advanced to the point where the center sills are stored. Here the sills are placed on the trucks by means of a one-ton Fordson gasoline tractor equipped with a 14 ft. boom. This tractor also carries the cover plate, side sills, side sill angles and top side angles from points of storage to the underframe assembly station.



Draft gear units are compressed in the yokes under air pressure in a machine specially designed for the purpose. They are then conveyed on a three-wheeled wagon equipped with an air jack and raised to proper position at the car. The coupler is then elevated by an overhead air motor hoist and the installation completed with but little manual effort.

The steel superstructure and Hutchins channel steel ends are laid on metal horses, riveted together and then placed in position on the underframe by means of overhead air motor hoists. At the last station the Hutchins Universal roof is assembled. The work is carried on from an overhead platform where the various roof parts are readily accessible. Hence there is no occasion to use ladders.

In the building of these cars every precaution is taken to assure long life of the steel members and the wood work by the use of rust and decay preventive materials. All metal parts are covered with red lead, while the wood joints are treated with white lead. To insure cars being absolutely tight all crevices, cracks, etc., are filled in with a special sealing cement, for the application of which a hand pressure gun is employed.

With the exception of the truck and paint work, the building operations are completed under cover. As is the case at any plant where piece work is the basis of compensation, the material layout is a very important matter. This phase of shop efficiency has been closely studied and the car parts, so far as possible, are stored in close proximity to the station where needed. The distribution is in the hands of two material men, also on piece work.

Each car requires two spray coats of paint. The color of the superstructure, excepting the roof, is brown, while the roof, underframe and trucks are painted black. The appropriate stenciling and markings are applied by air operated spray guns, a system introduced at Green Island last year. Under this arrangement metal stencils are employed, thereby assuring uniformity of application. Consequently the use of brushes is practically dispensed with. The cutting of paper stencils is no longer required because of the substitution of the metal stencils which seldom require renewal.

A description of the various mechanical steps involved was given in the November 1st issue of *The Bulletin.*

Wild Oats

A New York State farmer engaged the services of a wanderer who one night applied to him for a night's lodging and something to eat. All went satisfactorily for a week or so, and then the farmer routed out the newly hired man about 3:30 one morning.

"What's up, boss?" queried the hobo, drowsily rubbing his eyes.

"Time to get up and go to work."

"What's the big idea?"

"We're going to reap."

"Reap what?"

"Oats."

"Are they wild oats?"

"Wild oats? Of course not. Why?"

"Well, if they ain't wild oats, why do we have to sneak up on 'em like this in the dark?"

The Greatest Railroad Fight

THE railroads of the United States have fought many battles and are now conducting the fight of their life against unrestrained competition, and to coordinate their operation with other means of transportation and give the public the greatest service on record.

We are living in a new transportation age, with automobiles, buses, trucks, airplanes and artificial waterways. But no other agency than the railroad is so well able to handle a gigantic volume of traffic over long distances. No other agency is more essential to the proper functioning of modern industry.

More than $25,000,000,000 is invested in American railroads by over 2,000,000 investors. The lines are one of our greatest employers, taxpayers and buyers of materials and supplies from a multitude of other industries.

These simple facts should cause any thoughtful person to realize that the "railroad problem" is a very real problem in the life of a majority of American families.—*The Glens Falls Times.*

21st Engineers' Reunion

THE Twenty-first Engineers, Light Railway Society, composed of World War Veterans of this Regiment, are holding their 11th annual convention at the time of the American Legion Convention, September 20-22, 1931 at Detroit, Michigan.

The annual dinner is to be held Tuesday, September, 22nd at 7:00 P. M. at the Cadillac Athletic Club, in Detroit.

This one regiment gathered from nearly every state in the Union, constructed and operated a narrow gauge railroad, transporting part of the vast amount of food, ammunition and various supplies to twenty-three different combat divisions on the American fronts.

In order to correct and bring the roster of this regiment to date, all former members of the 21st Engineers are requested to send their permanent addresses to Earl V. Smith, at the Detroit Automobile Club, 139 Bagley Avenue, Detroit, Michigan.

Reservations for the annual dinner can also be made thru Mr. Smith.

Trapped

"Sorry to keep you waiting, old man, but I've been setting a trap for my wife."

"Good heavens! What do you expect?"

"A mouse."

Clicks from the Rails

Owns Grant's Chair

The camp chair which was part of General U. S. Grant's personal equipment during the Civil War is now owned by John O. Goodsell, Assistant General Passenger Agent of the Union Pacific, at Omaha, Neb. Brevet Lieutenant-Colonel C. G. Cunningham of the Army of Northern Virginia, Confederate States of America during the war, was recently asked to pose in the chair. "Captain" Cunningham, as he prefers to be called, says he devoted four very sincere years trying to shoot General Grant out of it. During the war he saw the Union commander frequently through field glasses and asserts that he pulled many a lanyard ordered to blow up his headquarters—and maybe his chair with it—but never succeeded.

✣

Engineman Wins Medal

Alfred Gish, Chicago, Rock Island & Pacific engineman at Oklahoma City, Okla., has been awarded a medal for heroic action by President Hoover. Some time ago the passenger train which Gish was pulling collided with a gasoline truck at a grade crossing near Hydro, Okla. The first portion of the train was set on fire, yet Gish stayed in the flaming cab and pulled his train a safe distance away from any possible explosion, thus saving the passengers from serious and possible fatal burns.

✣

Ancient Skull Found

The Skull of an Arctic walrus, believed to be between 20,000 and 30,000 years old, was found in Northern Manitoba by a member of a Hudson Bay Railway construction crew. It was discovered eight feet beneath the surface of a gravel ridge, about 35 miles due west of Hudson Bay. The tusks, fifteen inches long, are well preserved after thousands of years beneath the sands, although one is considerably worn at the tip.

Strawberry Shipments

Six express trainloads of strawberries, totaling 192 cars, and valued at about $384,000, wholesale price, recently made up one day's shipment out of the Louisiana strawberry belt over the Illinois Central. This year's crop, a record-breaker, was expected to total close to 5,000 cars. As each carload is worth approximately $2,000 growers expected to realize not far from $10,000,000.

✣

Free Miniature Golf

A miniature golf course, open to the public free of charge, was recently installed in the waiting room of the Underground Railways, London, as a publicity measure. On the opening day some 370 people played around the course.

Pheasant Nest on Track

Scarcely ten feet from the outside rail of the Pennsylvania's westward main track, one mile east of Hobart, Ind., a section gang discovered a ring-necked pheasant's nest containing four eggs. The bird appears to be unafraid of the trains which roar by or the employees who pass daily, but promptly leaves the nest when a stranger approaches.

✣

Hard to Identify

The twin brothers Clyde and James Schuck, employed respectively by the Delaware and Hudson and the Reading Railroad, in Philadelphia, look so much alike that their employers cannot tell them apart. Even relatives and close friends experience the same difficulty.

Teacher—Paphlagonia Jones, what is your father's occupation?

New Pupil—Please, Ma'am, he writes the names for the Pullman cars on the railroad—*Reading Magazine.*

A Rule

DO all the good you can,
By all the means you can,
In all the ways you can,
In all the places you can,
At all the times you can,
To all the people you can,
As long as ever you can.

—JOHN WESLEY.